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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,075	03/18/2004	Kia Silverbrook	FPD003US	5180

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SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, 2041
AUSTRALIA

EXAMINER	
GHATT, DAVE A	

ART UNIT	PAPER NUMBER
2854	

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/803,075	SILVERBROOK, KIA	
	Examiner	Art Unit	
	Dave A. Ghatt	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18,20,22-32 and 34-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18,20,22-32 and 34-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-18, 20, and 22-32, and 34-38 are objected to because of the following informalities: Claim 1 line 4 recites the language "An outer casing." [Emphasis added.] Maybe the applicant meant "an outer casing." Appropriate correction is required.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-7, 9, 11-18, 20, 22, 24, 27-31, 35, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 5,752,049) in view of Minemoto et al. (US 6,188,569). With respect to claim 1, as shown in Figures 2 and 3, Lee teaches a printing and display device comprising a data connection 312 for receiving print data from a computer 100. As shown in Figure 1, Lee teaches an outer casing (shown generally at 112) housing a panel display 102 for displaying images received from a computer. (See also, column 6 lines 1-25). Lee also teaches a printer (200, 210), the printer including a printhead 210 for printing onto paper on the basis of the print data. (See column 6 lines 12-25). Column 6 lines 1-12 also teaches a data connection hub 110 configured to allow connection of at least one data-receiving device to the printing and display device, enabling the data-receiving device to receive data from the computer. In fact, Lee teaches all the claimed subject matter except the display device 102,

is not flat as recited. As shown in Figures 1-3, Minemoto et al. teaches a flat panel display as recited. To one of ordinary skill in the art, it would have been obvious to include the display device as taught by Minemoto et al. in the apparatus of Lee in order to improve the quality of the visual display.

With respect to the requirement for a pagewidth inkjet printer, as shown in Figure 2, Lee teaches a page width laser print head. However as outlined in column 10 lines 23-40, the Lee apparatus may also include an inkjet printer. In view of this teaching of Lee, it would have been obvious to one of ordinary skill in the art to substitute the page width laser printhead for a page width inkjet because as taught in column 10 lines 23-40, this involves a known substitution of printer equivalents.

With respect to claims 2 and 22, Lee does not teach a flat display with the recited dimensions. However, Minemoto et al. teaches each of a 40 cm and 14 inch diagonal measurement as recited. As outlined in column 26 lines 16-23, Minemoto et al. teaches display dimensions that meet the diagonal measurement. As outlined above, to one of ordinary skill in the art, it would have been obvious to include the display device including the recited diameter measurement, as taught by Minemoto et al., in the apparatus of Lee, in order to improve the quality of the visual display.

With respect to claim 3-7, and the data connection hub and general protocol requirements, Lee does not teach the recited protocol elements. However, Minemoto et al. teaches USB connections that render the claimed subject matter obvious. Column 9 lines 44-52 of Minemoto et al. disclose the use of a USB (IEEE394) connector. In view of this teaching of Minemoto et al., it would have been obvious to one of ordinary skill in the art, to include the

outlined data connection hub and protocol requirements in the apparatus of Lee because computers are routinely connected to extra electronic devices to provide the benefit of additional processing functions. Furthermore, these USB connectors taught by Minemoto et al. provide smooth and efficient transfer of data among electronic components.

With respect to claim 9, the primary reference Lee teaches the system configured to receive print data (column 6 lines 12-25) and configured to display data (column 6 lines 56-67).

With respect to claim 11, it is not known if either Lee or Minemoto et al. teach a socket, but to one of ordinary skill in the art, it would have been obvious to include a socket as recited, because sockets are routinely used in electronic components to accept data cables.

With respect to claim 12, although Lee does not teach a wireless receiver, Minemoto et al. renders this claimed subject matter obvious. Column 5 lines 10-31 of Minemoto et al. teach the use of wireless connections. To one of ordinary skill in the art, it would have been obvious to use the wireless connection as taught by Minemoto et al., in the apparatus of Lee because wireless connectors provide the advantage of reducing the amount of physical elements.

With respect to claim 13, Minemoto et al. teaches USB connections that render the claimed subject matter obvious. Column 9 lines 44-52 of Minemoto et al. disclose the use of a USB (IEEE394) connector. In view of this teaching of Minemoto et al., it would have been obvious to one of ordinary skill in the art, to include the outlined data connection hub and protocol requirements in the apparatus of Lee because computers are routinely connected to extra electronic devices to provide the benefit of additional processing functions. Furthermore, these USB connectors taught by Minemoto et al. provide smooth and efficient transfer of data among electronic components.

With respect to claims 14 and 15, Figure 2 of the primary reference Lee teaches feed mechanism 218, configured to position the paper substantially parallel in at least one direction with respect to a plane defined by the flat panel display.

With respect to claims 16 and 17, column 2 lines 60-64 of the primary reference Lee teaches the processing of a single sheets, one at a time. Figure 2 shows a separator 216 for feeding a single sheet.

With respect to claims 18, 20, 28, and 29, although Lee does not specifically teach a color printer with 5,000 nozzles, or halftone imaging, in view of the teaching of column 10 lines 23-41 which outlines the use of various types of printers including ink jet printers, it would have been obvious to one of ordinary skill in the art to incorporate colored ink jet printer with the recited number of nozzles, and halftone printing, because halftone printing and color printers with 5,000 nozzles are routinely used in the industry, and they provide the benefit of producing more detailed images.

With respect to claim 24, insofar as structure is recited, the teaching of Lee in view of Minemoto et al. teaches the structural limitations as recited, and therefore has the *capability* of printing on standard size paper. The applicant is reminded that standard sized paper is not required to meet this claim limitation.

With respect to claim 27, although Lee does not teach a flat display, the secondary reference Minemoto et al. teaches a flat display. As outlined in column 20 lines 15-32, Minemoto et al. teaches an LCD display panel. As outlined above, to one of ordinary skill in the art, it would have been obvious to include the display device as taught by Minemoto et al. in the apparatus of Lee in order to improve the quality of the visual display.

With respect to claims 30 and 31, the print head as disclosed in the primary reference Lee is capable of printing images (including photographic images) and text data.

With respect to claims 35 and 36, as outlined in the above rejection to claim 1, Lee teaches a display wherein the paper passing between the display and the print head 210, a multi-sheet holder 108, a paper separator 216. With respect to the requirement for a stand to hold the panel display, the structure shown generally at 100 in Figure 2 of Lee provides this function.

With respect to claim 38, the arrangement as shown in Figures 2 an 3, and as outlined in column 5 line 50 to column 6 line 25, Lee teaches the capability to receive, via the interface 306, input from a user indicative of a print command, sending from the printing and display device to the computer system 100, a print request, and receiving, from the computer system and in response to the print request, a document to be printed, printing the document.

4. Claims 1, 15, 25, 26, 27, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwa et al. (JP 08267854 A) in view of Steinfield et al. (US 6,508,552). With respect to claim 1, as shown in Figures 1-3, Kashiwa et al. teaches a printing and display device that comprise a data connection for receiving print data from a computer (data processor). Any connection that transfers the print data to the printer from the processor meets the requirement for a data connection. As shown in Figure 1, Kashiwa et al. teaches an outer casing (shown generally at 4) housing a flat panel display 2 for displaying images received from a computer. Kashiwa et al. also teaches a printer 9, the printer including a printhead for printing onto paper on the basis of the print data. (See translated Abstract and Constitution). Insofar as structure is recited, Kashiwa et al. also includes a data connection hub (disk drive 5) configured

to allow connection of at least one data-receiving device (a floppy), enabling the data-receiving device to receive data from the computer. In fact, Kashiwa et al. teaches all the claimed subject matter, but is silent as to whether the print head 14 is page-width. Steinfield et al. teaches a printer with a printhead similar to that of Kashiwa et al. As outlined in column 1 line 56 to column 2 line 4, carrier driven printheads may be substituted for stationary pagewidth printheads. To one of ordinary skill in the art, it would have been obvious to include the page-width printhead as taught by Steinfield et al., in the apparatus of Kashiwa et al., because the stationary page-width printhead provides the advantage of reducing the number of required components.

With respect to claim 15, as shown in Figure 3 of the primary reference Kashiwa et al., the apparatus includes a feeding path parallel in at least one direction with respect to a plane defined by the flat panel monitor.

With respect to claim 25, insofar as structure is recited Kashiwa et al. teaches the claimed subject matter. As shown in Figures 1 and 3, Kashiwa et al. teaches the apparatus configured such that paper to be printed is fed manually into a paper path (at 15), that directs the paper from a region adjacent the upper edge of the flat panel display, past the printhead *for* printing, then out of the device adjacent a lower edge of the flat panel display.

With respect to claim 26, insofar as structure is recited Kashiwa et al. teaches the claimed subject matter. As shown in Figures 3 and 4, Kashiwa et al. teaches a curved paper guide 4 disposed beneath the flat panel display, such that the paper that has been printed is urged horizontally as it exits the device.

With respect to claim 27, Kashiwa et al. teaches an LCD display panel as recited.

With respect to claim 34, Figure 1 of the primary reference Kashiwa et al. teaches a stand (generally shown at 5) for holding the flat panel display in an operative position, wherein the stand includes at least one receptacle 26 configured to accept at least one replacement ink cartridge for supplying ink to the printer.

5. Claims 8, 10, 23, 32, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwa et al. (JP 08267854 A) in view of Steinfield et al. (US 6,508,552) as applied to claim1, 15, 25, 26, and 27 above, and further in view of Silverbrook (US 5,984,446). With respect to claims 8, 23, and 37, as outlined in the above rejection to claim 1, Kashiwa et al. and Steinfield teach all the claimed subject matter except for the teaching of a second pagewidth printhead to enable substantially simultaneous printing. The teaching of Silverbrook renders obvious the broad requirement for two print heads. As outlined in column 49 lines 22-47,Silverbrook teaches a printing arrangement that includes two printheads on either side of a receiver. In view of this teaching, to one of ordinary skill in the art, it would have been obvious to include two printheads on either side of the media path in order to enable printing on both sides of the receiver, as taught in the abstract of Silverbrook in column 49 lines 29-32.

With respect to claim 10, as broadly recited, the connection of Kashiwa et al. provides releasable or detachable connection of the computer system to the printing and display.

With respect to claim 32, the primary reference Kashiwa et al. teaches a personal computer.

Response to Arguments/Amendments

6. Applicant's arguments and amendments filed May 27, 2005 have been fully considered by the examiner. However, the requirements of independent claim1 are met by Kashiwa et al. (JP 08267854 A) in view of Steinfield et al. (US 6,508,552). The requirements of claim 1 are also met by the combination of Lee (US 5,752,049) in view of Minemoto et al. (US 6,188,569).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave A. Ghatt whose telephone number is (571) 272-2165. The examiner can normally be reached on Mondays through Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAG

Daniel J. Colilla
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Art Unit 2854